

IN THE CLAIMS

Please amend the claims as follows:

1. (Cancelled)
2. (Currently Amended) A method of expressing an antigenic molecule ~~peptide~~ on the surface of a viable cell, said method comprising:
 - contacting said cell with a said antigenic molecule ~~comprising the antigenic peptide~~ and with a photosensitizing agent, wherein said ~~peptide~~ molecule and said agent are each taken up into an intracellular membrane-restricted compartment of said cell;
 - irradiating said cell with light of a wavelength effective to activate the photosensitizing agent, such that the membrane of said intracellular compartment is disrupted, releasing said ~~peptide~~ molecule into the cytosol of the cell, without killing the cell ~~by irradiation~~;
 - wherein, said released antigenic molecule ~~peptide~~, or a part thereof of sufficient size to generate an immune response, is subsequently presented on the surface of said cell by a class I or II MHC molecule;
 - wherein presentation of the antigenic molecule ~~peptide~~, or part thereof, on the surface of said cell results in stimulation of an immune response; and
 - wherein the photosensitizing agent is selected from the group consisting of a porphyrin, phthalocyanine, purpurin, chlorin, benzoporphyrin, naphthalocyanine, cationic dye, and tetracycline, ~~and a lysosomotropic weak base.~~
3. (Cancelled)
4. (Currently Amended) The method of claim 2,3 wherein the antigenic molecule is a vaccine antigen or vaccine component.
5. (Cancelled)

6. (Previously Presented) The method of claim 2, wherein the cell is an antigen presenting cell selected from the group consisting of a lymphocyte, dendritic cell, macrophage and cancer cell.

7. (Cancelled)

8. (Previously Presented) The method of claim 2 wherein the photosensitizing agent is meso-tetraphenylporphine with 4 sulfonate groups (TPPS₄), meso-tetraphenylporphine with 2 sulfonate groups on adjacent phenyl rings (TPPS_{2a}), or aluminum phthalocyanine with 2 sulfonate groups on adjacent phenyl rings (AlPcS_{2a}).

9. (Currently Amended) The method of claim 2, wherein the antigenic ~~peptide~~ molecule and/or photosensitizing agent is bound to one or more targeting agents or carrier molecules.

10. (Previously Presented) The method of claim 2, wherein said method is carried out *in vitro* or *in vivo*.

11-21. (Cancelled).

22. (Currently Amended) A method of expressing an antigenic molecule ~~peptide~~ on the surface of a cell capable of antigen presentation, said method comprising:

contacting said cell with ~~an antigenic molecule comprising the antigenic peptide~~ and with a photosensitizing agent, wherein said ~~peptide~~ molecule and said agent are each taken up into an intracellular membrane-restricted compartment of said cell; and

irradiating said cell with light of a wavelength effective to activate the photosensitizing agent, such that the membrane of said intracellular compartment is disrupted, releasing said ~~peptide~~ molecule into the cytosol of the cell, without killing the cell ~~by irradiation~~,

wherein, said released ~~peptide~~ molecule, or a part thereof of sufficient size to generate an immune response, is subsequently presented on the surface of said cell by a class I or II MHC molecule, and

wherein the photosensitizing agent is selected from the group consisting of a porphyrin, phthalocyanine, purpurin, chlorin, benzoporphyrin, naphthalocyanine, cationic dye, and tetracycline, ~~and a lysosomotropic weak base.~~

23. (Cancelled)

24. (New) A method of expressing an antigenic molecule or a part thereof on the surface of a viable antigen presenting cell, said method comprising:

contacting said cell with the antigenic molecule and with a photosensitizing agent, wherein said molecule and said agent are each taken up into an intracellular membrane-restricted compartment of said cell;

irradiating said cell with light of a wavelength effective to activate the photosensitizing agent, such that the membrane of said intracellular compartment is disrupted, releasing said molecule into the cytosol of the cell, without killing the cell;

wherein, said released molecule, or a part thereof of sufficient size to generate an immune response, is subsequently presented on the surface of said cell by a class I or II MHC molecule;

wherein presentation of the molecule, or part thereof, on the surface of said cell results in stimulation of an immune response; and

wherein the photosensitizing agent is selected from the group consisting of a meso-tetraphenylporphine with 4 sulfonate groups (TPPS₄), meso-tetraphenylporphine with 2 sulfonate groups on adjacent phenyl rings (TPPS_{2a}), or aluminum phthalocyanine with 2 sulfonate groups on adjacent phenyl rings (AlPcS_{2a}).

25. (New) The method of claim 24, wherein the antigen presenting cell is selected from the group consisting of a lymphocyte, dendritic cell, macrophage and cancer cell.

26. (New) The method of claim 24, wherein the antigenic molecule and/or photosensitizing agent is bound to one or more targeting agents or carrier molecules.

27. (New) The method of claim 24, wherein said method is carried out *in vitro* or *in vivo*.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

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28. (New) The method of claim 2, wherein at least 90% of the cells are not killed.
29. (New) The method of claim 2, wherein at least 95% of the cells are not killed.